

## Locus Response to EPA Comments for the RES234-236 BSER dated 2/25/2022

EPA Comments – 2022-03-16	Locus Response – 2022-03-31
<p>1.</p> <p>Section 1 Introduction: The BSER introduction needs to provide some context to the Triple Site OOU and why VI is present in the neighborhood. While past BSERs do not need to be revised, include in future BSERs a general overview of the Triple Site OOU with a link to the EPA website. As an example that Philips may choose to revise, EPA provides the example below:</p> <p><i>The RES234/235/236 property at 744 San Jule Court is located within the EPA Triple Site Offsite Operable Unit Superfund Site (<a href="http://epa.gov/superfund/TripleSite">http://epa.gov/superfund/TripleSite</a>). The Triple Site was established to clean up groundwater contaminated with trichloroethylene(TCE). TCE is used in various industries and products such as a degreaser, and as an ingredient in glues, paint removers, spot removers, and some cleaners. TCE can cause harmful health effects if present at high enough levels. Historically, about 0.5 miles away TCE was used at the former Signetics, AMD Inc., and TRW Microwave sites (collectively referred to as the Triple Site) to fabricate silicon chips. TCE from these three sites was spilled or released to the environment and leaked into groundwater. While the Signetics, AMD Inc., and TRW Microwave operations stopped in the 1960s-1980s, contaminated groundwater below the sites migrated to the San Miguel neighborhood and despite active treatment will still take many years to clean up. Based on results from testing done at homes in the San Miguel neighborhood, TCE in groundwater is volatilizing and has migrated into some neighborhood homes through a process called vapor intrusion.</i></p>	<p>General overview has been added to the BSER Introduction consistent with the current Triple Site Fact Sheet.</p>

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<p>2. Section 3 Communications Plan: Include the November 18, 2021, EPA letter for preemptive mitigation sent to RES234/235/236 in Appendix R.</p>	<p>The subject EPA letter has been added to Appendix R as suggested. In prior conversations with EPA, we had discussed excluding letters that request access/sampling in cases where, ultimately, sampling access is granted and sampling conducted. But going forward, the November 2021 outreach letters will be included in relevant forthcoming BSERs.</p>
<p>3. Section 3 Communications Plan: Include in the communication plan that EPA and/or Locus will additionally be communicating air sampling results to tenants.</p>	<p>Locus revised Section 3 as follows: sampling results will be communicated to tenants with owner/property management approval.</p>
<p>4. Section 5.3 Results with Indoor Source Interferences: It is noted that PCE and “<i>TCE are commonly used in dry cleaning.</i>” Verify that “commonly used” is correct and if the use of PCE, and TCE, for dry cleaning in California has now been largely phased out and will be completely phased out by 2023.</p>	<p>The Vapor Intrusion Mitigation Advisory by the DTSC and the 2021 EPA-approved Triple Site fact sheet both reference VOCs on dry-cleaned clothing.</p> <p>Since BSERs provide a complete historical picture of a residence, Locus suggests leaving text as is for BSERs having data that precedes the phase-out.</p> <p>A sentence has been added acknowledging that PCE and TCE is largely being phased out by 2023.</p>
<p>5. Section 7. Mitigation Plan: Note if the submembrane depressurization system installed is active or passive.</p>	<p>An Active SMDS has been specified as suggested.</p>

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<p>6. Section 10.2 Initial Post-Installation Sampling Plan: It is noted that “air samples will be collected from the crawlspace and living space.” Include a reference to Figure 2, which shows the location of these samples.</p>	<p>A reference to Figure 1 was added as suggested.</p>
<p>7. Section 10.2: It is noted that passive samplers were used at the following Location IDs: RES234-AMB-1, RES234-PATH-1, RES235-AMB-1, RES235-PATH-3, and RES236-AMB-1.” So it is easier to read, list each sample location in a separate bullet and include the location where the sample was collected. For example, RES234-AMB-1: Living Room.</p>	<p>Revised as suggested.</p>
<p>8. Section 10.2: The word “to” is missing from the sentence: “The goal of such improvements, if deemed necessary, will be modify...”</p>	<p>Revised as suggested.</p>
<p>9. Table 1: Why are the Urgent and Accelerated Response Action Levels of 6 µg/m3 and 2 µg/m3 underlined?</p>	<p>The subtitle of the action levels reads “Exceedances of these levels are noted in the data table using the formatting shown below”. The goal was to use formatting to show an increasing level of urgency in action level. Long-term Exceedance: <b>Bold</b> Accelerated level Exceedance: <b><u>Bold and Underlined</u></b> Urgent Level Exceedance: <b><u><i>Bold, underlined, and italicized.</i></u></b> This methodology has been applied consistently in BSERs submitted to EPA over the past several months. No change was made to Table 1, except as Comment 10 also applies to Table 1.</p>
<p>10. Table 2: The description of “Kitchen Sink” is assumed to mean Under Kitchen Sink, but this needs to be stated in the table.</p>	<p>Revised as suggested</p>

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<p>11.</p> <p>Appendix D Residential Building Survey Field Forms: There are many issues with the building survey having incomplete information, which will need to be programmatically addressed in the future. Some of the incomplete information is minor and in and of itself not an issue; however, collectively the building surveys needs improvement. The following are examples of questions left blank in the Survey Form:</p> <ul style="list-style-type: none"> <li>• “Are the heating/cooling systems routinely operated?” Heating/cooling systems is critical information to better understand the potential for vapor intrusion into a building.</li> <li>• “Describe remodeling, painting, or significant cleaning activities that have occurred over the last 6 months (what was done, what area, and when).” The answer should be positively affirmed as “yes” or “no”.</li> <li>• “Describe any chemical infused materials that are regularly brought into the building (including dry cleaned clothes/fabrics or those brought home from work (what/how often)?” and related questions. The questions were left blank, including the checkboxes for “yes” / “no” for question such as “Have site chemicals of concern been used or stored in building or adjacent garage?”</li> <li>• “What pathways to the subsurface were observed (e.g., utility conduits penetrating slab or interior wall/s, crawlspace openings or access points, floor drains)?” was left blank. As the survey question is left blank, it does not appear that the surveyor appreciates that gas lines that feed a “centrally located wall heater(s), cable/internet floor penetrations, or heating/cooler floor registers” are considered floor penetrations.</li> <li>• “Do parts of the indoor environment appear stagnant?” This would include rooms that do not have heating/cooler vents or fans, which may be rooms that should be targeted for sampling.</li> <li>• “Potential Sampling Locations?” The rational for why the sampling locations were selected needs to be included here based in part on answers to all of the questions above. Rooms to target for example would be where there are floor penetrations; room with stagnant air flow; rooms with negative pressure; or bedroom with sensitive populations, such as women of childbearing age.</li> <li>• RES236 form section for Additional Notes only states “N/A Covid Sampling”. It is unclear what this means.</li> </ul> <p>Prior to the next building survey event EPA requests 21 days advanced notice of tentative field dates so EPA has an opportunity to audit the building survey event.</p>	<p>Locus will strive to improve completeness and detail in building survey answers in the future. At the same time, Locus would like to note that most of RES234–236 sampling was conducted when nobody was home, or the resident was not English-speaking during the first sampling event, and was not home at the second sampling event for follow-up. Furthermore, precautions were taken due to Covid with respect to residents and the property manager who was providing access to each unit. Therefore, it seemed appropriate to perform sampling and the building survey while only gathering information that was openly observable to the eye and limiting time indoors.</p> <p>Furthermore, Cynthia (APTIM) audited the RES237 building survey and sampling event on 16 February 2022, which was also led by Locus. APTIM confirmed that Locus performed a satisfactory building survey prior to sampling when a resident was home and cooperative.</p> <p>Regardless, prior to the next building survey event Locus will provide 21 days advanced notice of tentative field dates so EPA has an opportunity to audit the building survey event.</p> <p>Additional Notes were added to the RES236 form explaining the note “N/A Covid Sampling”</p>

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<p>12.</p> <p>Appendix Q Analytical Laboratory Reports and Chain-of-Custodies: The Eurofins laboratory Narrative for Workorder# 2112548R1 states that samples for “RES235-PATH-2-121621 were cancelled on 1/5/22 per client's request” and that “Per client's request, the workorder was reissued on 1/10/2022 to cancel samples... RES235-PATH-2-121621 and to remove the results form the final report.” Sample RES235-PATH-2 was not shown in the Building Survey, which implies that field notes from the 12/16/21 event showing the location of RES235-PATH-2 were not included in the BSER and potentially that the BSER field notes were not completed contemporaneously with the field event. The BSER needs to be revised to include the 12/16/21 field notes and where the RES235-PATH-2 sample was located. Additionally, the BSER needs to include why the results from RES235-PATH-2 were removed from the laboratory report.</p> <p>EPA also requests that Locus follow-up with EPA with more details on what the results were that were requested to not be reported.</p>	<p>Initially, RES235-PATH-2 [and RES233-PATH-3 (RES232/233 NFA BSER provided to EPA on 17 March 2022)] was collected on the ledge of the passive crawlspace vent without cutting through the wire-mesh. Upon further discussion, it did not seem appropriate to categorize that sample as either a true OUT or a true PATH sample, so it was decided to eliminate that location for its lack of usefulness to the investigation. To avoid excessive explanation for years to come, the sample analyses were excluded BEFORE the report was issued. The lab incorrectly included the result in the original report and subsequently reissued the report. The laboratory report narrative misstates the timing of the request for exclusion of the sample.</p> <p>The RES235-PATH-3 [and RES233-PATH-4] samples were placed during the second sampling event when the crawlspace vent mesh was cut open and then patched up, enabling proper placement of a sample in the crawlspace.</p> <p>The report has been revised with this explanation regarding RES235-PATH-2 (Section 5.1). The Appendix D Building Survey form was updated with notes to include the RES235-PATH-2 and RES235-PATH-3; the Building Survey form was completed contemporaneously with the field event, but crawlspace samples accessed from outside the building were not drawn on the Unit #3 survey form.</p>
<p>13.</p> <p>Appendix Q: For the samples collected on 12/16/21, the Eurofins Laboratory Report for Workorder# 2112548R1 includes a chain of custody (COC) for samples collected on 1/5/22. A revised BSER needs to be submitted to EPA that includes a corrected Eurofins laboratory report with the correct COC for the samples collected on 12/16/21.</p>	<p>Appendix Q places COC first, then Lab Report. The 12/16/2021 COC appears on pages 103–104. The associated Workorder #2112548R1 is on pages 105–129.</p>
<p>14.</p> <p>Appendix Q: The laboratory report includes sample results from buildings other than RES234/235/236. EPA suggests that in the future laboratory reports are building specific and if this can be accomplished by using separate COCs for each building sampled.</p>	<p>Outdoor, blank, and duplicate samples apply to all samples collected in a single day. Often, multiple residences are sampled in a day. It is not feasible to separate COCs for each building sampled. Notably, COCs and lab reports do not contain CUI/PII.</p>
<p>15.</p> <p>Appendix TBD: EPA requests that a photo log showing the sampling locations be included in the BSER template. What is shown in the photos will need to be approved by the residents and the photos redacted from public versions of the BSER.</p>	<p>As addressed in Comments 11, 12, and 13, Locus will aim to provide more details and completeness in building surveys while also reducing complexity and increasing transparency.</p> <p>Photographing residential indoor space and belongings adds invasiveness and work complexity. Ultimately, a photo log could be reasonable for confirmation sampling events; sampling events following an initial indoor air result above 2 µg/m<sup>3</sup> TCE.</p>